1.Man and Medicine: Towards Health for All

* Hippocrates
* Robert Koch
* Louis Pasteur
* John Snow

2. Concept of Health and Disease

* Morbidity indicators
* Social pathology
* HDI
* Determinants of health and disease

3. Principles of Epidemiology

* Describe how a double blind trial is conducted. Comment on various ethical issues in conducting such trials.
* Discuss the comparative merits and demerits of community based and hospital based epidemiological research.
* RCT
* Nested case control studies
* Bias in trials
* Ethics and trials
* What is epidemiologic transition? Discuss the effect of this phenomenon on health and disease profile in our country over the next 25 yrs.
* Discuss the merits and demerits of case control design to study association between smoking and lung cancer.Highlight the bias and the methods to overcome the same.
* Define association and mention its types. Discuss over the criteria for judging causality.
* Steps involved in RCT. Describe the same by example.
* Causation and association.
* Describe various types of case control studies. Discuss the design, conduct and analysis of a case control study and add a note on the resolution of bias.
* Double blind trials
* Herd immunity
* Strength of association.
* Discuss and describe biases encountered in various epidemiological studies. Add a note on resolution of bias.
* Enumerate various epidemiological methods and describe the time trends in descriptive studies. Discuss the components of hypothesis

4. Screening for disease

* Prescriptive screening
* Blinding in clinical trial
* Epidemiology of leptospirosis in India.
* Validity of screening test
* What are the criteria for screening of a disease? Describe the criteria of a good screening test. Add a note on the problem of border-line.

5. Epidemiology of Communicable diseases

* Enumerate arboviral diseases. Discuss the epidemiology of Dengue fever in India.
* Discuss in detail various principles of prevention and control of communicable disease.
* Travellers diarrhea
* Penicillin resistant gonococci
* Decribe epidemiology, clinical features and management of SARS. How spread is prevented at international level.
* Epidemiology of Rabies. Discuss management of animal bites in man.
* Discuss epidemiology, prevention , control of poliomyelitis. Comment on Pulse Polio Immunization.
* Epidemiology of P.falciparum in India.
* Discuss the d/d of exanthematous fever.How will u diagnose, treat and prevent measles?
* Chandipura virus infection.
* Decribe epidemiology, clinical features and management of DHF. How can the disease be prevented in urban set up?
* Enumerate arboviral diseases common in India. Give an account of epidemiology, prevention and control of Japanese Encephalitis. JE in India.
* Discuss the resurgence of Polio in our country and the options available to health planners.
* Genetic shift and drift.
* Typhoid vaccine
* Eradication of guinea worm.
* Treatment of Kala Azar.
* Discuss epidemiology and control of Hepatitis B.
* Describe the life cycle and bionomics of Aedes mosquitoes. Describe various methods for control of these vectors.
* Hepatitis C
* Discuss epidemiology of ARTI in clinic and natural history of disease.
* Describe epidemiology of Ascariasis . Discuss measures of its control.
* Occult Filaria.

6. Non Communicable diseases

* Surveillance of non communicable diseases
* Life style makes the difference. Discuss and describe the epidemiology of cardiovascular disease and national notion plan for prevention and control of cardiovascular disease.
* Prepare a research protocol with appropriate study design to ascertain the risk factors of stoke. What are the possible biases and how will you minimize them in the study?
* Discuss the role of screening for disease in public health.
* Describe the role of nutritional factors in cardiovascular diseases with special reference to the high prevalence of cardiovascular disease in Indian population.
* Comment on growing problems of DM in India. Plan a comprehensive programme to control DM.
* Prevention of obesity.
* Discuss Stroke as a public health problem. Enumerate strategies to prevent and control this problem.
* Discuss the epidemiology of two most common cancers in Indian women. Discuss the various screening methods and suggest for the mass screening for any one of them.
* Genetic factors in DM.
* Modifiable risk factors in IHD.
* Prevention of breast cancer.
* Discuss the role of stress on health and describe the various stress reduction technique for prevention of life style disease.
* Describe the changing health profile in India.Write the emerging and remerging diseases. Discuss the measure to prevent and control emerging diseases.
* How will you plan for prevention of DM in primary health care centre area.
* Define and classify the accidents. Describe the epidemiology of accidents and discuss the role of legislations in accident prevention in India.
* Discuss accidents as an emerging public health problem in India. Describe various indicators used for monitoring the problem.
* Discuss the concept of life style diseases. Enumerate the actions proposed to be taken by Central government to address these problems in our country through 11th Five year plan.

7. Demography and family planning.

* Q. Describe the important highlights of national population policy. Describe the salient features in our approach to family planning. Describe how will you evaluate the performance of a PHC as DHO in family welfare programme.
* Q. Define the terms fertility and fecundity. Describe the various factors affecting fertility &the difference between RCH I & RCH II.
* Q. What do you understand by demographic cycle? What are India’s demographic goals? Describe the steps taken by Govt. in achieving these goals.
* Q. Family planning current need.

8. Preventive medicines in obstetrics, paediatrics and geriatrics

* Q. Road to health chart.
* Q. freeze dried vaccine.
* Q. Describe factors affecting growth &development in children &describe in short the measures for the maintenance of health in paediatric age group.
* Q. Pneumonias of paediatric age group.
* Q. Social obstetrics.
* Q. Describe the different factors which influence the occurrence of PEM in preschool children in India. Suggest measures to prevent the same.
* Q. Discuss how the MCH care can be strengthened in the tribal areas of India.
* Q.”Risk approach” is a managerial tool to improve MCH care. Discuss &describe the measures taken by the govt. to improve the health of mothers. Mention indicators to measure health of mothers.
* Q. Define MMR. Discuss the problem of maternal deaths in India & describe preventive measures.

9. Nutrition and Health

* Q. Discuss the aetiology of malnutrition. Explain the provisions in NRHM to tackle the problem of malnutrition.
* Q. Trace elements.
* Q. Implementation of nutritional assessment programme in slum areas.
* Q. Discuss epidemiology. Prevention &control of nutritional anaemia in India
* Q. Assessment of obesity.
* Q. What is nutritional surveillance &nutritional monitoring? Describe the methodology of nutritional surveillance &public health importance.
* Q. Discuss the role of nutritional factors in the causation of disease. Draw a plan to improve nutritional status of children living in slums.
* Q. Discuss commonly occuring food toxins in India & their prevention.
* Q. Classification of PEM.
* Q. Nutritional requirement of elderly.
* Q. Describe natural history of vit A deficiency in India. Discuss the strategies adopted for its prevention and control giving current status.

10. Medicine and Social Sciences

* Q. Psychosomatic medicine.

11. Environment and Health

* Q. Describe the relation between environment & health.
* Q. Biolarvicide.
* Q. Describe various criteria &standards for drinking water quality. Comment on fluoridation and deflouridation of water.
* Q. Describe various air pollutant & write briefly about air quality monitoring.
* Q. Oxidation pond.
* Q. Health effects of non-ionising radiation.
* Q. Bacteriological parameters of water quality.
* Q. Role of insecticides for the control of vector borne disease.
* Q. Water conservation.
* Q. Tsetse fly.
* Q. Endemic fluorosis.
* Q. Food fortification.
* Q. Pasteurisation of milk.
* Q. Quality standards of inorganic chemical substances in drinking water.
* Q. Humidity & its health effects.
* Q. Super chlorination.
* Q. Barometric indices.
* Q. What is meaning of potable water? Enumerate various methods of water purification & describe the salient feature of rapid sand filtration process.
* Q. Write on food adulteration &PFA act.
* Q. Breakpoint chlorination.
* Q. Classification of insecticides.
* Q. Discuss the importance & methods of rural sanitation of India.
* Q. Describe the effects of air pollution on human health. Discuss the mesures to control air pollution in India.
* Q. Rodent control.
* Q. Discuss the problems associated with waste disposal in large metropolitan areas. Suggest comprehensive measures for waste m/m in a large city.
* Q. Household prevention of water transmitted parasitic disease.
* Q. Arsenic in drinking water.

12. Hospital waste management.

* Q. Describe the health effects of hospital waste. Outline the measures for disposal of hospital waste with 500 beds.
* Q. Disposal of hazardous waste.
* Q. Describe the role of hospital waste m/m committee in a tertiary hospital. Discuss the advantage &disadvantage of t/t &disposal options for health care waste.
* Q. Health problems of construction workers.
* Q. Discuss on outline plan of management & disposal of BMW generated in a district hospital.
* Q. Biomedical waste.
* Q. How do u classify hospital waste? how is it disposed off?
* Q. Write any five definitions used in waste disposal. Describe the methodology of disposal of hospital waste.

13. Disaster management

* Q. Give an outline plan for prevention & surveillance of diseases after floods in a township of 5lakhs population.
* Q. Define disaster. What are its types? Discuss the post disaster public health interventions.
* Q. Describe health problems as a result of large scale floods &discuss measures to deal with such disaster.

14. Occupational Health

* Q. Enlist notifiable diseases in industries. What are the measures undertaken to prevent & control them?
* Q. Describe occupational hazards in Radio-nuclide industry.Describe measures for its prevention.
* Q. Describe in detail various factors responsible for occupational cancers &preventive &control measures for the same.
* Q. More than 90% of sickness absence in industry is due to non-occupational causes. Discuss what are the repercussions of health insurance schemes on sickness absenteeism?
* Q. Zoonosis in industry.
* Q. Discuss the epidemiology of heat stress disorder in an industry.
* Q. Discuss health hazards of agricultural workers. Suggest preventive measures.
* Q. Health hazard of welders. (IR, heat)
* Q. Prevention of road traffic accidents.
* Q. Non-ionising radiation.
* Q. Adverse effect of heat.
* Q. Coal worker’s pneumoconiosis.
* Q. Occupational related muscular-skeletal disorders? How to reduce them?
* Q. Pre placement examination vs periodic examination.

15. Genetics and Health

* Q. Factors affecting genotype distribution in population.
* Q. Discuss genetic counselling in prenatal & postnatal period. Discuss female foeticide & its demographic implication.
* Q. Epidemiological studies of autosomal dominant disease.
* Q. Population genetics.
* Q. Discuss the role of genetic counselling in health care.
* Q. Prevention of genetic disorder.
* Q. Screening for genetic disorder.

16. Health information and medical statistics

* Q. Health intelligence.

17. Communication for health education

* Q. Role of mass-media in health literacy.
* Q. Difference between health education & health propaganda.

18. Health care of the community

* Q. Discuss the role of PHC in India. Discuss measures to improve this performance.
* Q. Describe the evolution in health care delivery system in India. Mention the principles of components of PHC. How will you evaluate the PHC strategy?